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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/975,719

DATE: 03/22/2002

TIME: 10:11:59

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\03222002\I975719.raw

4 <110> APPLICANT: Ausubel, Frederick M.
 5 Rahme, Laurence G.
 7 <120> TITLE OF INVENTION: VIRULENCE-ASSOCIATED NUCLEIC ACID
 8 SEQUENCES AND USES THEREOF
 10 <130> FILE REFERENCE: 00786/361003
 12 <140> CURRENT APPLICATION NUMBER: US 09/975,719
 13 <141> CURRENT FILING DATE: 2001-10-10
 15 <150> PRIOR APPLICATION NUMBER: US 09/199,637
 16 <151> PRIOR FILING DATE: 1998-11-25
 18 <150> PRIOR APPLICATION NUMBER: US 60/066,517
 19 <151> PRIOR FILING DATE: 1997-11-25
 21 <160> NUMBER OF SEQ ID NOS: 437
 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 42235
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Pseudomonas aeruginosa
 30 <220> FEATURE:
 31 <221> NAME/KEY: variation
 32 <222> LOCATION: (1)...(42235)
 33 <223> OTHER INFORMATION: N is any nucleic acid.
 35 <400> SEQUENCE: 1

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39 cccgcggcgt cagcgacatc cggcagtggta tgaacaagtt gtacggggag gccttcggcg	240
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59	acaccgcgt	cagcaagctg	ccctggcgag	gacaacagcg	ccgcgtgcgg	atggtcgtct	1440
60	accgcggat	ccgcaaggag	gatgcgcaga	ttcgcggaca	ggaccggcg	gctgtacctga	1500
61	aatccatctg	cgagcgtatc	caaggcggcc	tggcaacgc	cggcatacg	gttgcgcga	1560
62	tggcggaca	ggagatcagg	aactggttga	tccgcgtgg	caacccgcac	ccggatcacc	1620
63	tcggccaggc	cgaggcggac	ctacgtcgct	tctacgaact	ggtatgccgt	ccggacgaac	1680
64	cgatcctgca	ggatgaattt	ccactggccg	acggcactga	cttctccag	aacctgttct	1740
65	atcggcagcc	tgtttccat	gccaccagg	gcgtatggct	cttcgatgcc	atgcccgcacc	1800
66	gagtattgt	ggtcgaccag	ttgaacaaag	cgccgctgac	aggccacttc	accggcgaga	1860
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68	gcatcaccat	ggtcggtacg	ccgcaggaca	tgcttggagg	gcatctgcag	cagctctcg	1980
69	aaaaggccgt	tggtgacacc	caggcctcg	tccacacccg	cgaggacgtg	gccaccgttc	2040
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71	gccgcgacca	tacccagtt	gaggaacgt	gcatcaccct	gagcaacgta	ctgctcg	2160
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104	ctgctgt	tgctgg	atccgc	gggttag	ttctgg	gggcctg	4140
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106	ctggagtgcc ccttctgcaa ggtctacacc ccgcggctta	agcgctgggt agacagccat	4260
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112	ccgaccctcg tcatccggga caaccagacg ggacaagcg	tgaagcttga aggcatggcc	4620
113	gacgagacca cggtgctgtc ggcgcatacg tggctagcca	aggatctcta gcgtcgcc	4680
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153	cgtatccggcc ctcgaacggc tggagaagaa aggcggcaac	gatggcgtaa cctgggttgg	7080
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158	gacGGGTGCT ggcgtCGGCC tcACCCGCT gATCCAGGAG acCTACGACA aGaAGCTCCA	7380
159	gtcgtcTGcAG gagCTGCTGT cGAAGAGCAA accACTGACT gcAGAGAAcC tggCTGCGGC	7440
160	cgGCACCGAT gCTCTGCCAA ttACCCGCGG CGTCATCGAG gCgCTGCGCG acGAGCGTGA	7500
161	ccaggACGTC ctggcgcGCC gcCTGGCGTC cgATGTCTCC ctGATGGACG tgCTCAGCAA	7560
162	ggcactGCTA ctgcAGCGCC tgATGTTCGC cggcGCCAAg gagCCCAACG tcGCCGCCAA	7620
163	cgGCCTGGCC ACCCAAGCCG tcGATCAGCA gACCAGCCTC ctGcAGCAGG AGATCTCAA	7680
164	tctcaAGACC gaACTGGAAC tCCGTcGCgA gttGGCCAGC aACTCCCCA tgcGGGTcAt	7740
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207	ggagaccggc	cgctatcaga	atcgacgca	agtcatccgg	gcaggcttgc	gcctgctgct	10320	
W--> 208	gcaacaggaa	gcccagatan	gcccagatan	cgcccaagct	cgaaaaccctc	cgcaacgcaa	catccagtgg	10380
209	gctgtatgcaa	ctggagcgcg	gctgtatgcaa	cgagatcacc	agcgacgaaac	tggccaaata	10440	
210	cctcgacgag	ctcgcaacc	aggcgagcca	ctgaagcatg	gccaagtacc	gcatctctca	10500	
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219	acatccacca	gcagggtccc	catggtttat	gcccgttgc	atgggcttgc	ccacttcgatt	11040	
220	gcattcccccc	tgacccaagca	tttgcatttc	tgctgaccac	cgcttgcatt	cggttacc	11100	
221	agtcacacccg	tagtcacgac	cggctgcgt	cgacccaaag	cggaccccttgc	tgacagacccg	11160	
222	aaatcggcca	aaagcagacg	ctcaaaaagca	tctacgaaaag	caggacaaat	tccggggat	11220	
223	actcctctac	gtacgttgc	tatatcgcc	aggaatttgc	tgaaccgcgg	tgccggagaga	11280	
224	tctcctcaaa	ctgtatgggtt	gcacgcata	cgaagcagat	tacataggag	gcttgcgt	11340	
225	ttcaacagct	cctgagggg	cttgggttgc	ccatggtttc	cacggcccaa	tcgttgcgt	11400	
226	cattgacgat	tccgcgtggct	ttttcagttac	gcacgcgttgc	gcccgttccatt	acccagccca	11460	
227	atgcggccctt	gcccgttgc	aagcgattcc	aaggactgc	atccatgttag	ccagccctct	11520	
228	aatgcatgt	tgtataggtt	aggcgtcgt	tatttcggcg	tggatgttgc	gactggaggt	11580	
229	ttagcgtgtt	gagtcgtat	gtcgtgcgt	atataagtct	catctcgcc	tccgcacatg	11640	
230	gatgcgttta	gattcagcaa	gtggaaaaaa	gcgcgagcgc	taaaaggaaa	gctgcggcc	11700	
231	ggcgtgtca	gtacgttgc	accccgccaa	cacttaggaa	gaggtatca	tgaagttaca	11760	
232	ggcataatcg	ctgcagaact	accgcggct	gcgcgtatgtt	gtcattgcgc	tcgttgcgt	11820	
233	aatttctatc	tttgcgtgt	ccaacaacag	cgggaagaca	tccgcgtcc	aaggcctgt	11880	
234	ctcaatgc	cgcggcgaag	tgaagaagtt	cgagcttcc	gacttcgt	cggcgctgt	11940	
235	ggccgagatc	gtacgttgc	gcaggacgc	ccctggcgat	gaggatgcgc	ccaaaagg	12000	
236	accgtccata	ctcttgc	tctgggttcc	cgtcgttgc	gacgacccct	ccactgcgt	12060	
237	gtcgtgt	ccgagcact	agtgggacgg	caagtgcgt	gggatccggg	tagcgttgc	12120	
238	gcctcggtat	gcccacgac	tcgttgc	gttccatgaa	ctacatgaga	aggccaacaa	12180	
239	cgcagctgt	gcccgttgc	ccaaacgc	ggccgcgg	gagcaagctg	tgaggcg	12240	
240	cgcggaaagac	gcccgttgc	tgggtggccg	tgccggcgag	tacaaggctt	ggccagaaag	12300	
241	cctgacgaa	tacccatca	aggaactgag	caaggaatac	acccgttgc	actacgt	12360	
242	cgatgagcgg	gttccatgc	gttatcaggc	aaggaggcc	gactacgc	cgttacc	12420	
243	aggcaaggag	ccggccgt	cagccatttc	caagtgcgt	gtgagggtcg	acttcgt	12480	
244	cgcgcagcgg	cacccatcg	acccagatgc	cggtagctt	gatcgccgc	agagttgt	12540	
245	gcggcgtct	agcagggttct	atcaccgca	cctggagaag	cgtggcgac	accatgcgg	12600	
246	tctcaaggcg	ctagatacc	cgagaagga	gtcgtactt	cacccatcg	aagtcttca	12660	
247	tgacaccctc	acgcgcctgg	ccaaacgc	ctatccggc	gtcaacaatc	cgagatcg	12720	
248	gattcggcg	gccttgc	cgaccactgt	cttggggca	gacgccaagg	ttcactacgt	12780	
249	gatccggc	gtacgttgc	ccaaacgc	agacagctac	aatggcttgc	ggttcaagaa	12840	
250	tctggtctac	atgggtgg	agtcgttgc	cttgcacg	cgtggaaaag	ccgaggatg	12900	
251	caagcgagct	ccgcttcat	tggtcttcat	tgaggaccc	gaggcgcac	tgcacgc	12960	
252	gatccagcag	gttccatca	ggaacgttt	gcgcctt	gaggatgcta	acgatcacgc	13020	



Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/975,719

DATE: 03/22/2002
TIME: 10:12:01

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03222002\I975719.raw

L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:2979 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80
L:3037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82
L:3090 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84
L:4325 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121
L:4326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121
L:4340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:4341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:4342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:4344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:4413 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:128
L:4836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137
L:4837 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137
L:4838 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137